

# AngularJS 2 : Mastering Google's front-end framework

## migration et développement

Hands-on course of 4 days - 28h

Ref.: AGU - Price 2025: 2 530 (excl. taxes)

### EDUCATIONAL OBJECTIVES

At the end of the training, the trainee will be able to:

- Master the fundamentals of the AngularJS 2 Framework
- Quickly create complex Web applications
- Know how to integrate unit tests into development
- Learn best practices for development and entering production
- Participants
- Modular composition of an application with AngularJS 2

### TRAINING PROGRAM

## THE PROGRAMME

last updated: 05/2024

### 1) » JavaScript development: Refreshers

- ECMAScript 5 best practices.
- ES6/ES2015, general overview.
- New syntax: scope, "template string", "arrow functions", etc.
- Essential tools. Babel, Traceur, and Typescript.
- Typescript in detail, configuration.
- ES6 modular approach.
- "Modules Loaders": SystemJS, "import/export".
- Hands-on work ▶ Migrating an ES5/ES6 script. Implementing the environment with TypeScript.

### 2) » Migrating from AngularJS 1.x to AngularJS 2

- Comparison and "topography" of concepts.
- Prepare for migration. Structure of an AngularJS 2 application.
- The modules AngularJS 2, "core" and common modules.
- Principle of dependency injection.
- Classification of directives: Component, Attribute, Structure.
- Decorators: Defining hierarchies.
- Hands-on work ▶ Migrating an AngularJS 1.x application to AngularJS 2.

### 3) » Dependency injection

- Using annotations and decorators.
- Configuring the injector.
- Managing modules: Best practices.
- Creating injectable services. Classifying services.
- "BootStrapping" an application.
- Hands-on work ▶ Structuring, "scaffolding" an application project.

### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@ORSYS.fr](mailto:psh-accueil@ORSYS.fr) to review your request and its feasibility.

#### 4) » Defining components

- Life cycle in the application.
- Template syntax: Interpolation/expression, "Binding", and filters.
- Transformation directives: ngIf, ngFor, ngSwitch, etc.
- Syntactical definition, the (\*) symbol. Local variables.
- Class of components. Configuration directives: Selector, provider.
- User events.
- Hands-on work » Creating components.

#### 5) » Managing forms, Routing, and HTTP queries

- Control and ControlGroup.
- Validation and custom error management.
- "FormBuilder", advanced form components.
- Data link via HTTP.
- Creating routes. Settings and wildcard.
- Targeting, "router-outlet", routing events.
- Hands-on work » Validation form. Consuming a REST API.

#### 6) » Unit tests. Best practice and tools

- Configuring the test environment.
- Writing tests Jasmine. Coverage.
- Test case: Pipe, component, application.
- ngUpgrade: Coexistence and ngForward.
- AngularJS2 "Coding guide Style".
- Hands-on work » Writing unit tests. Implementing TDD.

## DATES

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### REMOTE CLASS

2025 : 22 juil., 07 oct.